

Work Order ID 115305-2

\*115305\*

Page 1

March-24-14 2:43:29 PM

Item ID: D206-817-011

Accept

Revision ID:

Item Name: Screw-In Windshield Modification

Start Date: 3/24/14 Start Qty: 4.00

Required Date: 3/24/14 Req'd Qty: 4.00

Reference: ECN14-535

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

Cust Item ID:

Customer:

Approvals: Process Plan: V Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI9659	A								
DSI9687	PA1								
IIN-D206-817	D								

100

Document Control

0.00

\*100\*

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D206-817-011

CHG DO

DAS  
06  
9-39

APR 23 2014

per ECN14-535

3x

# Work Order ID 115305

**\*115305\***

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March-24-14 2:43:29 PM

Item ID: D206-817-011 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Screw-In Windshield Modification  
 Start Date: 3/24/14 Start Qty: 4.00 **\*4\*** Cust Item ID:  
 Required Date: 3/24/14 Req'd Qty: 4.00 **\*4\*** Customer:  
 Reference: ECN14-535

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Pick Kit	0.00							
<b>*110*</b>									
Packaging	Memo	0.00							
Packaging	PULL FROM STK: 2 X D206-817-011 B110123 2 X D206-817-011 B111468								
	REMOVE FROM KIT AND REPLACE WITH NEW REV. PER ECN 14-535/ DSI9687:								
	REMOVE FROM EACH KIT/SCRAP:								
	1 X D4545-041 B 108240 (x3)								
	1 X D4545-042 B 109263 (x3)								
	1 X D4541-3 B								
	1 X D4541-4 B								
	1 X D4541-5 B 109414 (x3)								
	1 X D4541-6 B 109436 (x3)								
	1 X D4541-7 B 103181 (x3)								
	1 X D4541-8 B 108195 (x3)								
	2 X D4542-5 B 110102 (x4) B 109423 (x2)								
	1 X D4594-1 B 108028 (x3)								

APR 23 2014

DAS  
30  
9-89

14/04/23

**Work Order ID 115305**

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**\*115305\***

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Item ID: D206-817-011

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Screw-In Windshield Modification

Start Date: 3/24/14 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 3/24/14 Req'd Qty: 4.00

**\*4\***

Customer:

Reference: ECN14-535

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

ADD TO EACH KIT - NEW REV:

1 X D4541-1 B  
1 X D4541-2 B  
1 X D4542-1 B  
1 X D4542-2 B  
~~1 X D4541-3 B~~  
~~1 X D4541-4 B~~  
1 X D4541-5 B  
1 X D4541-6 B  
1 X D4541-7 B  
1 X D4541-8 B  
2 X D4542-5 B  
1 X D4594-1 B <sup>426</sup>  
78 x MS20359AD3-4 B  
20 X MS21059L08 B  
37 X MS21059L3K B  
2 X MS21061L3K B  
20 X MS27039-0810 B  
20 X NAS1149DN832J B

120

QC4- 100% Inspect kits for completeness

0.00

DAS

**\*120\***

06

QC

9-89

0.00 APR 23 2014

Quality Control

Memo

RE-INSPECT KIT

3x

# Work Order ID 115305

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**\*115305\***

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Item ID: D206-817-011

Revision ID:

Item Name: Screw-In Windshield Modification

Start Date: 3/24/14 Start Qty: 4.00

Required Date: 3/24/14 Req'd Qty: 4.00

Reference: ECN14-535

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Stop **\*NS2\***

Cust Item ID:

Customer:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
<b>*130*</b>									
Packaging	Memo	0.00							
Packaging	REPACKAGE PER PPP USING NEW B/N NEW LABELS REQ'D AT NEW CHG #								
	Identify and pack for shipping as per PPP D206-817- 011 Location: <u>OSI</u>								
	PPP Rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									

APR 23 2014

DAS  
06  
9-89

14/04/23 *[Signature]*  
for MCT

14/04/23

# Picklist Print

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Page 1

Work Order ID: 115305

**\*115305\***

Parent Item: D206-817-011

**\*D206-817-011\***

Parent Item Name: Screw-In Windshield Modification

Start Date: 3/24/14

Required Date: 3/24/14

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.02.14 NEW ISSUE DD VERF: IPP REV:B  
12.05.09 AS PER IIN REV.C DD VERF:EC IPP REV:C 12.06.12  
ECN 12-602 DD VERF:EC IPP REV:D 13.04.23 as per IIN  
dwg rev.D DD verf:JLM IPP REV:E 13.06.26 as per  
CHG004/DSI9659 DD VERF:JFS IPP REV:F 14.03.24 AS PER DSI 9687  
DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D206-817-011		Manufactured	No				Each	0.0000		13			
<b>*D206-817-011*</b>									**				
Screw-In Windshield Modification													
D4541-1		Manufactured	No				Each	0.0000		13			
<b>*D4541-1*</b>									**				
Bracket													
D4541-2		Manufactured	No				Each	0.0000		13			
<b>*D4541-2*</b>									**				
Bracket													
D4541-3		Manufactured	No				Each	0.0000		13			
<b>*D4541-3*</b>									**				
Bracket													
D4541-4		Manufactured	No				Each	0.0000		13			
<b>*D4541-4*</b>									**				
Bracket, RH													
D4541-5		Manufactured	No				Each	0.0000		13			
<b>*D4541-5*</b>									**				
Bracket, LH													

**\*D4541-1\*** DAS 06  
B115216 X 239

**\*D4541-2\*** DAS 06  
B115217 X 2

**\*D4541-3\*** N/A

**\*D4541-3\***

**\*D4541-4\***

**\*D4541-5\*** DAS 06  
B115219

115540 (X1) DAS 31 9-89  
115216 (2X) DAS 28 9-89

115217 (2X) DAS 28 9-89  
115358 (X) DAS 31 9-89

115219

115219

115219

# Picklist Print

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Work Order ID: 115305

\*115305\*

Parent Item: D206-817-011

\*D206-817-011\*

Parent Item Name: Screw-In Windshield Modification

Start Date: 3/24/14

Required Date: 3/24/14

Start Qty: 4.00

Required Qty: 4.00

D4541-6 Manufactured No Each 0.0000

\*D4541-6\*  
Bracket, RH  
DAS 06 9-89

\*\* A3 115293 DAS 28 9-89 DAS 31 9-89

D4541-7 Manufactured No Each 0.0000

\*D4541-7\*  
Bracket  
DAS 06 9-89

\*\* A3 115220 DAS 28 9-89 DAS 31 9-89

D4541-8 Manufactured No Each 0.0000

\*D4541-8\*  
Bracket  
DAS 06 9-89

\*\* A3 115294 DAS 28 9-89 DAS 31 9-89

D4542-1 Manufactured No Each 10.0000

\*D4542-1\*  
Retainer, Inner, LH  
DAS 06 9-89

\*\* A3 115282 DAS 28 9-89 DAS 31 9-89

Location Loc Qty Loc Code

ST532 10  
101314 5  
108232 5

D4542-2 Manufactured No Each 5.0000

\*D4542-2\*  
Retainer, Inner, RH  
DAS 06 9-89

\*\* A3 115283 DAS 28 9-89 DAS 31 9-89

Location Loc Qty Loc Code

ST532 5  
103184 5

D4542-5 Manufactured No Each 0.0000

\*D4542-5\*  
Retainer, Inner  
DAS 06 9-89

\*\* 86 W 115993 X 115293 DAS 28 9-89 DAS 31 9-89

D4594-1 Manufactured No Each 0.0000

\*D4594-1\*  
Plate  
DAS 06 9-89

\*\* A3 115222 DAS 28 9-89 DAS 31 9-89

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Shop Packet Print

Page 2

# Picklist Print

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Work Order ID: 115305

**\*115305\***

Parent Item: D206-817-011

**\*D206-817-011\***

Parent Item Name: Screw-In Windshield Modification

Start Date: 3/24/14

Required Date: 3/24/14

Start Qty: 4.00

Required Qty: 4.00

MS20426AD3-4

Purchased

No

Each

8,699.000

**\*MS20426AD3-4\***

RIVET

DAS  
06  
9-89

\*\*

DAS  
33  
9-89

Location

Loc Qty

Loc Code

MF4

545

125578

545

ST334

3192

m127432

3192

ST509

4962

125578

4962

125578

Each

994.0000

MS21059L08

Purchased

No

**\*MS21059L08\***

Nut

DAS  
06  
9-89

\*\*

DAS  
33  
9-89

Location

Loc Qty

Loc Code

MF4

88

125654

88

ST508

906

125654

906

125654

Each

689.0000

MS21059L3K

Purchased

No

**\*MS21059L3K\***

Nutplate

DAS  
06  
9-89

\*\*

DAS  
33  
9-89

Location

Loc Qty

Loc Code

GA

179

m127635

179

ST316

510

m127703

510

127703

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Shop Packet Print

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# Picklist Print

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Work Order ID: 115305

**\*115305\***

Parent Item: D206-817-011

**\*D206-817-011\***

Parent Item Name: Screw-In Windshield Modification

Start Date: 3/24/14

Required Date: 3/24/14

Start Qty: 4.00

Required Qty: 4.00

MS21061L3K

Purchased

No

Each

60.0000

**\*MS21061L3K\***

NUT PLATE

DAS  
06  
9-89

Location

Loc Qty

Loc Code

GA

4

125268

4

ST317

56

123603

56

\*\*

DAS  
33  
9-89

DAS  
31  
9-89

MS27039-08-10

Purchased

No

Each

2,218.000

**\*MS27039-08-10\***

Screw

DAS  
06  
9-89

Location

Loc Qty

Loc Code

Mezz

6

5865

6

ST307

2212

123100

2029

123265

47

m127430

136

\*\*

DAS  
33  
9-89

128799

DAS  
31  
9-89

NAS1149DN832J

Purchased

No

Each

2,908.000

**\*NAS1149DN832J\***

Washer

DAS  
06  
9-89

Location

Loc Qty

Loc Code

MF4

944

M127255

944

ST293

1802

M127813

802

M128429

1000

st510

145

124555

145

ST510a

17

M126319

17

\*\*

DAS  
33  
9-89

14-04-01

DAS  
31  
9-89

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Shop Packet Print

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# **ENGINEERING CHANGE NOTICE** **DART AEROSPACE LTD**

Date:	14.03.24	Job No.:	ENG5105	ADR Yes/No:	N	ADR Date:		ECN #:	14- 535
Product No.:	D206-817	Created By:	AJS	Approved By:	<i>[Signature]</i>				
Product Name:	Screw-In Windshield Kit	Checked By:	<i>[Signature]</i>						

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
Director of Operations	Y	NF	<i>[Signature]</i> 14.3.26
Production Manager / Coord.	Y	LL/MF	<i>[Signature]</i> 14.3.26
Purchasing Coord.	N	CL	
Production Engineering Coord.	Y	DD/JLM	<i>[Signature]</i> 14.03.27
Production Engineering Coord.	N	DL	
Customer Order Processing	<i>[Signature]</i>	RM/CC	

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
DQA / QA Coord.	Y	PS	<i>[Signature]</i> 14.03/26
QC Coordinator	Y	ED	<i>[Signature]</i> 14.03/26
Customer Support	Y	SW/LM	<i>[Signature]</i> 14.03.26
Customer Technical Support	Y	MB/HS	<i>[Signature]</i> 14.03.26
Marketing Manager	Y	KO	<i>[Signature]</i> 14.03.26
Sales Support Manager	Y	NM	<i>[Signature]</i> 14.03.26

Reason for Change:

**Documents Affected:**

Release D4541 Rev. E, D4542 Rev. E, D4594 Rev B and DSI 9687 Rev. A

IF APPLICABLE: NCR: \_\_\_\_\_

PAR: 14-330

CAR: \_\_\_\_\_

PAPERWORK UPDATE ☒

PARTS MUST COMPLY ☒

PREVIOUS PARTS SATISFACTORY ☐

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3					

#	Engineering Actions	Reqd	Resp	Notes	Complete
4	Required Documents/Drawings/Item ID's Under Review (URF)	N			
5	Update Master Document List (MDL)	Y	AJS	Revision G	14.03.26 <i>[Signature]</i>
6	Update Document Record (DR)	N			
7	Update Product Compatability Matrix	N			
8	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
9					

#	Document Control Actions	Reqd	Resp	Notes	Complete
10	Move / Update Electronic Files / Design Journal	Y	KJ		14.03.26 <i>[Signature]</i>
11	Update Product Specification Files (Bluefiles)	Y	KJ		14.03.26 <i>[Signature]</i>
12	Update Approved/Preliminary Dwg PDF Files	Y	KJ		14.03.26 <i>[Signature]</i>
13	Update Product Development Summary (STC applications)	N			
14	Update QSI 021 (TC/FAA STC) and/or STC Approval List	N			
15	Create/Update Parts / STC Database	N			
16	Update / Verify Airworthiness Release Certificate Database	N			
17	Create / Update Change Record Form / Item Card Database	Y	KJ	SEE BELOW	14.03.26 <i>[Signature]</i>
18	Create / Update Packaging Process Plan (PPP)	Y	KJ		14.03.26 <i>[Signature]</i>
19	Red Decals required on Packaging Process Plan (PPP)?	N			
20	Update Controlled Supplier Documents (Qpulse) Database	N			
21	Update Grey Project Binder / Electronic Project Folder	Y	KJ		14.03.26 <i>[Signature]</i>
22	Update D-Part / M-Drawing / DSI / DEO Master Binders	Y	KJ		14.03.26 <i>[Signature]</i>
23	Manufacturing Licensing Agreement Update	N			
24					

**Description / Action:**

D206-817-011 NOW AT CHG 005

If the following parts are in stock at earlier revisions scrap: D4541-1,-2,-5,-6,-7,-8

D4542-1,-2,-5 ✓

D4545-041/-042 ✓

D4594-1 ✓

ECN Verified & Complete: *[Signature]*

Date: 14/3/31

**Linda Lacelle**

---

**From:** Marc Bellavance  
**Sent:** April-03-14 2:38 PM  
**To:** Peggy McDonald; David Shepherd; Alain Madore; Bill Beckett  
**Cc:** Sian Willems; Mike Petsche; Nigel Forbes; Linda Lacelle  
**Subject:** SIWK (FW: 4542-5)

All,

Had an interesting phone conversation with Mr. Bill Boatright from Bell Piney Flats. Bill was telling me that overall, they are very pleased with the latest changes we brought to the kits based on his feedback. He would still like to see some minor changes (increased length and removal of identification mark/slot on D4542-5 Retainer and a change in shape to D4541-1/-2 and possibly D4542-1/-2). The changes to D4542-5 can happen immediately (sort of) but we will need to wait on flat patterns he is to send me next week to update the other parts. He would also like some sort of amendment to our IIN with respect to the mod of a Bell part (David, call me if you would like to discuss this one).

The reason why he wants to see those changes has to do with a kit they are about to ship to Bell Mirabel today or tomorrow. He also added what he heard through the grapevine: "nothing official yet but Bell Mirabel might decide to opt for installation of the kit on the production line depending on how it goes with the install".

Linda, I will be putting D4542-5 under review momentarily and the under review will be extended to the other parts once I have more details from Bill.

Marc

---

**From:** Boatright, Billy [<mailto:bboatright@bh.com>]  
**Sent:** April-03-14 1:34 PM  
**To:** Marc Bellavance  
**Cc:** Van Fleet, David; David Shepherd  
**Subject:** RE: 4542-5

Hey Marc

As shown this is why the slot is not necessary.  
FYI we did receive today Qty 4 retainers on SO115750 sales order.

Sr. Lead Inspector

Bill Boatright

Six Sigma Greenbelt



423-538-5111 Fax 423-538-8469

[bboatright@bh.com](mailto:bboatright@bh.com)



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---

**From:** Boatright, Billy  
**Sent:** Wednesday, April 02, 2014 3:48 PM  
**To:** 'Marc Bellavance'  
**Cc:** Van Fleet, David; David Shepherd  
**Subject:** 4542-5

Hey Marc

The long grove that is cut in the end of the new retainer needs to go away (if possible).

See attached pic

Sr. Lead Inspector

Bill Boatright

Six Sigma Greenbelt



423-538-5111 Fax 423-538-8469

[bboatright@bh.com](mailto:bboatright@bh.com)



# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-817 REV. D  
& INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-817 REV. 2

REF. TCCA STC SH12-3  
REF. FAA STC SR03091NY  
REF. EASA STC 10039042

## 1.0 PURPOSE

THE PURPOSE OF THIS DART SERVICE INSTRUCTION (DSI) IS TO FACILITATE INSTALLATION OF THE RETAINERS ON THE LOWER PORTION OF THE WINDSHIELD, FOR D206-817-011 KITS AT CHG 005 OR LATER, BY REPLACING THE RIGID D4545-041/-042 RETAINER ASSEMBLIES WITH SEPARATE BRACKETS AND RETAINERS THAT ARE ASSEMBLED BY THE INSTALLER AND ALLOW FOR EASIER ADJUSTMENT.

## 2.0 PARTS LIST

(IS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4541-1	BRACKET
1	D4541-2	BRACKET
1	D4542-1	RETAINER
1	D4542-2	RETAINER
190	MS20426AD3-4	RIVET
43	MS21059L08	NUTPLATE
93	MS21059L3K	NUTPLATE
2	MS21061L3K	NUTPLATE
42	MS27039-0810	SCREW
42	NAS1149DN832J	WASHER

(ADDED)

(WAS)

QTY -011	PART NUMBER	DESCRIPTION
X	D206-817-011	SCREW IN WINDSHIELD MODIFICATION KIT (MODIFIES BOTH LH & RH WINDSHIELDS)
1	D4545-041	RETAINER, LH INNER (LOWER)
1	D4545-042	RETAINER, RH INNER (LOWER)
112	MS20426AD3-4	RIVET
23	MS21059L08	NUTPLATE
56	MS21059L3K	NUTPLATE
22	MS27039-0810	SCREW
22	NAS1149DN832J	WASHER

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY:   
D. SHEPHERD (DE # 02)

DATE: 14.03.18  
CERT. NO.: SH12-3  
ISSUE NO.: 1

A	NEW ISSUE	AJS	14.03.18
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9687	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		RETAINER UPGRADE	NTS
DATE	14.03.18	COPYRIGHT © 2014 BY DART AEROSPACE LTD	
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